

Fostering Health and Wellness Through SunAWARE[™] Actions, Grades K-2

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National Health Education Standards Alignment with the SunAWARE[™] Program:

The National Health Education Standards (NHES) were developed to establish, promote, and support health-enhancing behaviors for students in all grade levels—from pre-Kindergarten through grade 12. The NHES provide a framework for teachers, administrators, and policy makers in designing or selecting curricula, allocating instructional resources, and assessing student achievement and progress. Importantly, the standards provide students, families and communities with concrete expectations for health education.

The Children's Melanoma Prevention Foundation's SunAWARE[™] Program directly aligns with the National Health Education Standards, allowing for easy, justifiable implementation into educational programs to support youth health.

The overarching goal of the SunAWARE[™] Program is to provide students with the information and skills needed to identify the relationship between safe sun protection practices and the reduction of the risk of skin cancer, to enhance and promote personal health.

<u>NHES Standard 1</u>-Students will comprehend concepts related to health promotion and disease prevention to enhance health.

<u>NHES Standard 3</u> - Students will demonstrate the ability to access valid information, products, and services to enhance health.

<u>NHES Standard 7</u> - Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

<u>NHES Standard 8</u> - Students will demonstrate the ability to advocate for personal, family, and community health.

Performance Indicator (PI) 1.5.1 Describe the relationship between healthy behaviors and personal health.

Other National Health Education Standards and their accompanying performance indicators are referenced within each lesson sequence of the SunAWARE[™] Program.

Goal:

Through information and awareness activities, elementary school students will understand the need for ultraviolet radiation protection and choose to integrate the SunAWARE[™] action steps into their daily lives, thereby reducing the risk and incidence of skin cancer.

Objectives:

1. Students will understand how the sun's rays (ultraviolet radiation) can be both helpful and harmful to humans.

2. Students will learn how weather, time of day, and the seasons impact sun exposure.

3. Students will understand that human beings inherit different skin types and that this affects their sensitivity to the sun.

4. Students will recognize the importance of parental guidance and school supervision regarding ultraviolet radiation exposure.

5. Students will be introduced to proven methods of sun protection.

6. Students will be introduced to the SunAWARE[™] acronym to reinforce safe sun behaviors.

Materials: Flannel board, felt planets, felt people, felt animals, UV influencing factors (felt pieces demonstrating glass, altitude, clouds, reflective surfaces, sunscreen, sun protective gear, etc.).

Visuals:

- Shadow Rule illustration
- Skin Types chart
- Sunscreen Label illustration
- Body Map

Vocabulary: ultraviolet radiation (UV rays), ozone layer, orbit, reflection, shadows, skin color (pigment), moles, freckles

Opening Motivator: How many of you have ever had a sunburn?

Lesson Sequence:

I. Factors that affect Ultraviolet Radiation^a

1. Using the felt board kit with sun and planet, represent the sun and its rays reflecting on the Earth as it spins on its axis and orbits the sun. Include concepts of seasons, time of day, altitude, reflection, ozone layer, weather, and "shadow rule".

2. Introduce concept of positive and negative aspects of sun's rays. Explore what different animals and humans have to protect themselves from UV rays.

(^a NHES 7; PS 7.2.1 - Demonstrate healthy practices and behaviors to maintain or improve personal health.)

II. Factors that Affect Skin Sensitivity^b

1. Using a felt board and figures, introduce concept of pigmentation (skin and eye color).

2. Using felt animals illustrate the natural protection of hair, scales, feathers, etc.

3. Explore with students the impact of the sun's rays on their skin including tans, sunburns, freckles, and moles.

(^bNHES 1; PI 1.2.3- Students will analyze/recognize how the sun's rays affect their skin's appearance and skin health.)

III. Skin Changes Secondary to UV Exposure^b

1.Explore with students the impact of the sun's rays on their skin including tans, sunburns, freckles, and moles.

(^bNHES 1; PI 1.2.3- Students will analyze/recognize how the sun's rays affect their skin's appearance and skin health.)

IV. Proven Methods of Sun Protection^{c,d}

1. Using the felt board kit, introduce the concepts of sun protective gear, including specialized clothing, hats, and sunglasses to protect skin and eyes from UV (ultraviolet radiation) exposure.

2. Using felt board hats, demonstrate why wide-brimmed hats offer better UV protection.

3. Using felt board trees, awnings, building, etc., show how shade can protect us from excessive exposure to UV rays.

4. Discuss sunscreen labeling including Sunburn Protection Factor (SPF), broad spectrum, water resistance, dose (handful rule), and reapplication.

(°NHES 3; PI 3.2.1- Students will identify valid products to ensure skin health and protect their skin from UV damage.)

(^dNHES 7; PI 7.2.1- Students will demonstrate effectiveness of the use of sunscreen as a deterrent to skin damage from UV rays.)

V. SunAWARE Acronym^e

Review each action step in the "AWARE" acronym as it pertains to health and wellness. Utilize the SunAWARE rap song to illustrate action steps.

Avoid *unprotected* exposure to sunlight, seek shade, and never indoor tan.

Wear sun protective clothing, including a long-sleeved shirt, pants, a wide-brimmed hat, and sunglasses year-round.

Apply recommended amounts of broad-spectrum sunscreen with a sunburn protection factor (SPF) \geq 30 to all exposed skin and reapply every two hours, or as needed.

Routinely examine your whole body for changes in your skin and report suspicious changes to a parent or healthcare provider.

Educate your family and community about the need to be SunAWARE[™].

(^eNHES 8; 8.2.2- Students will encourage peers and family members to follow SunAWARE[™] action steps to protect their skin from sun damage which may lead to sunburn.

Closure

Emphasize that the "E" is for "educating others". Enlist students as SunAWARE™ Ambassadors charged with educating their families and friends about the need for sun protection.

Reflection

What will you tell your family that you have learned about being safe in the sun?

Assessment Based on Objectives

- 1. The SunAWARE[™] K-2 Curriculum Post-Test, available at: https://www.melanomaprevention.org/images/pdf/curriculum/SunAWARE_K-2_Post_Test.pdf
- 2. Performance on independent practice sheets listed in "Teacher Resources".
- 3. Review formal teacher evaluation and follow up, as needed.

Special Needs Adaptations

- 1. Use large print for handouts.
- 2. Provide Paraprofessional Aides with guidance to reinforce lesson in school environment.
- 3. Use visuals to reinforce lesson such as dolls, umbrellas, and sun protective gear.
- 4. Involve special needs students interactively in lesson presentation.
- 5. Select from videos listed in "Teacher Resources".
- 6. Partner special needs and non-special needs students for activities.

Plan for Independent Practice 1. Norbert Coloring page at https://www.melanomaprevention.org/index.php/sunaware/sunaware-curriculum 2. Sun Safety for Kids Activity Sheets http://www.sunsafetyforkids.org/resources/activitysheets/

Extensions

- 1. American Academy of Dermatology SPOT Skin Cancer Children's Toolkit
- 2. <u>Ray & the Sunbeatables Sun Safety Program for PreK, K, and 1st grade students.</u> Developed by MD Anderson Cancer Center.

Additional Cross-curricular Connections

1. Math: recognition of number value as related to SPF protection.

2. Language Arts: use of SunAWARE[™] books as listed in *Teacher Resources*. Books may be employed for discussion and as writing and/or illustration prompts.

3. Physical Education: demonstrate acceptable gear for sun protection, encourage discussion about exposure to sun during sports and recreational activities.

Teacher Resources

Catching Melanoma Early & Self Screening Guide, available from Melanoma Research Foundation at <u>https://online.flippingbook.com/view/712689/</u>

Stay Sun Safe with Spot, available from Melanoma Research Foundation at <u>https://online.flippingbook.com/view/837774/</u>

Children's Books:

Danger at Graves Light, Barrow, Mary Mills and Maryellen Maguire-Eisen, available free Epub link https://www.melanomaprevention.org/index.php/what-we-do/educate/sunaware-resources

Wiseheart Saves the Dawn, Maguire-Eisen, Maryellen and Jane Shanny, available free Epub link https://www.melanomaprevention.org/index.php/what-we-do/educate/sunaware-resources

What are these Spots on my Skin? Naughton, Scott, available free Epub link https://www.melanomaprevention.org/index.php/what-we-do/educate/sunaware-resources

Skin Sense: A Story About Sun Safety for Young Children. By Lehrer-Glickman, Lori. L.G. Publishing: 2009

Otto Goes to the Beach. By Parr, Todd. Little, Brown and Company, New York: 2003.

Videos:

SunAWARE Rap https://www.youtube.com/watch?v=JYNCg1Zy2Og&feature=youtu.be

Holderness Family Sun Dance <u>https://www.youtube.com/watch?time_continue=2&v=SvHCxr4QkFQ</u>

SunAWARE Dance Craze

Websites:

- Children's Melanoma Prevention Foundation: <u>http://www.melanomaprevention.org</u>
- Melanoma Research Foundation: <u>https://www.melanoma.org</u>
- National Environmental Education Foundation: <u>https://www.neefusa.org/sunwise</u>
- National Council for Skin Cancer Prevention: <u>http://www.skincancerprevention.org/resources</u>
- Skin Cancer Foundation: <u>https://www.skincancer.org/</u>
- Science NetLinks Skin Deep Project: http://www.sciencenetlinks.com/lessons.php?DocID=552
- World Health Organization: <u>http://www.who.int/topics/ultraviolet_radiation/en/</u>

Articles:

The Community Guide: Skin Cancer: Primary and Middle School-Based Interventions: Available at: <u>https://www.thecommunityguide.org/findings/skin-cancer-primary-and-middle-school-based-interventions</u>

The Important Role of Schools in the Prevention of Skin Cancer, Gery P. Guy, Jr, PhD, MPH, Dawn M. Holman, MPH, and Meg Watson, MPH (2018) Available at: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6048593/</u>

Is Sunscreen Safe and Effective for Your Child, OPED, Maryellen Maguire-Eisen, published May 20, 2019. Available at: <u>https://patch.com/massachusetts/hingham/skin-protecton-remains-critical-amid-extended-fun-sun</u>

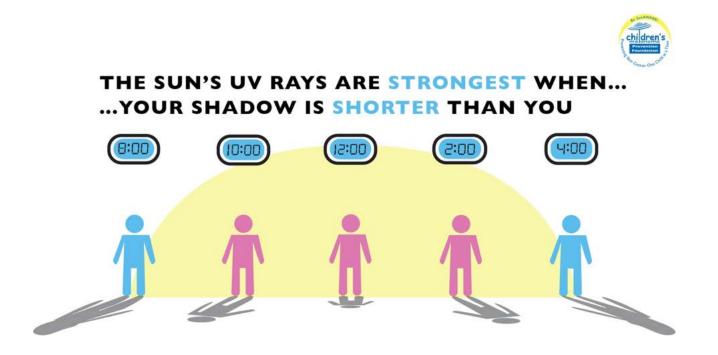
Ultraviolet Radiation Exposure and its Impact on Skin Cancer Risk, Seminars in Oncology Nursing, in-print.2016. Watson, M, Holman, D, Maguire-Eisen, M. Available at: <u>https://www.melanomaprevention.org/index.php/what-we-do/educate/additional-resources</u>

Skin Cancer: A Growing Health Problem for Children, Seminars in Oncology Nursing, Vol 29:206-213, 2013. Maguire-Eisen, M. Available at:

https://www.melanomaprevention.org/images/sidebar/Skin Cancer A Growing Health Problem for Children.pdf Addendums:

- 1. Shadow Rule
- 2. Skin Types
- 3. Sunscreen Label
- 4. Body Map
- 5. Norbert Coloring Page

Addendum 1



SKIN I TPES		
ТҮРЕ І	Always Burns, Never Tans	
TYPE 2	Burns Easily, Tans Minimally	
TYPE 3	Sometimes Burns, Slowly Tans	
TYPE 4	Burns Minimally, Always Tans	
TYPE 5	Rarely Burns, Deeply Pigmented	

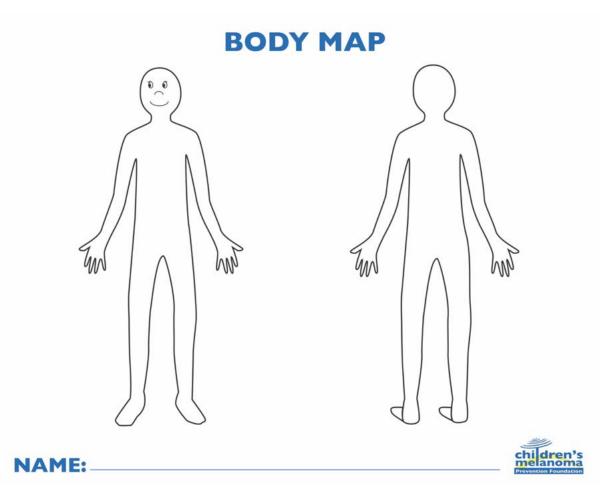
SKIN TYPES

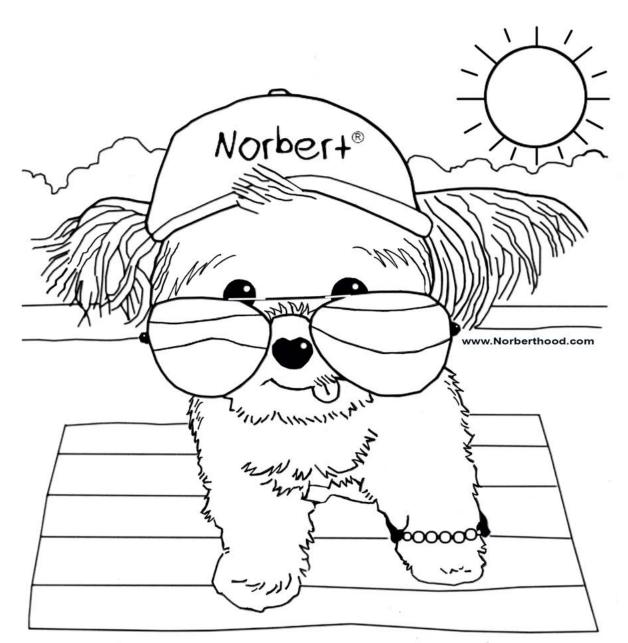


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ADDENDUM 3







SUNAWARE:

- A: Avoid going outside without sun protection
- W: Wear hat, sunglasses, swim shirt
- A: Apply a handful of sunscreen to cover your whole body
- R: Routinely check your skin for signs of sunburn
- E: Educate your family about sun protection

